REMARKS/ARGUMENTS

The Office Action mailed November 15, 2006 has been considered. Applicant acknowledges the allowable subject matter of claims 15 and 21-24. Claims 29-54 have been canceled without prejudice or disclaimer as being directed to a non-elected invention made without traverse in Applicant's prior responsive communication dated September 11, 2006. Reconsideration of the pending claims and allowance of the application in view of the present response is respectfully requested.

Claim 25 has been amended to correct a minor antecedent basis deficiency. The term "excitation sensor" has been amended as "excitation transducer." Applicant submits that this amendment does not narrow claim 25, but merely corrects a minor deficiency in claim terminology.

Claims 1-14, 16-20, and 25-28 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hill (Pub. No. US 2001/0006006 A1, hereinafter "*Hill*") in view of Paradiso et al. (Pub. No. 2003/0217873 A1, hereinafter "*Paradiso*").

Applicant's claim 1 recites, among other features, a touch sensitive apparatus that includes a plurality of active buffer circuits, each respectively coupled to a sensor configured to sense bending waves in a touch plate. Claim 1 further recites a controller coupled to the sensors via the active buffer circuits and to the excitation transducer via a non-actively buffered connection.

On page 7 of the Office Action, the Examiner states that *Hill* does not mention a plurality of active buffer circuits each of which is coupled to one of the sensors. The Examiner further states that *Hill* does not mention a controller coupled to the sensors via the active buffer circuits and to the excitation transducer via a non-actively buffered connection.

The Examiner relies on *Paradiso* for teaching a plurality of active buffer circuits respectively coupled to one of the sensors and a controller coupled to the sensors via the active buffer circuits. The Examiner contends that it would have been obvious to one of ordinary skill in the art to modify the touch sensitive apparatus of *Hill* using *Paradiso's* sensors and plurality of active buffer circuits. The Examiner contends that such a combination would result in a controller coupled to the sensor via the active buffer circuits

and to the excitation transducer via a non-actively buffered connection so as to increase signal strength and improve the signal-to-noise ratio.

Applicant respectfully submits that claim 1 is not rendered obvious by the combination of *Hill* and *Paradiso* on several grounds. The asserted combination, for example, fails to teach or suggest all the features of claim 1. The Examiner acknowledges that *Hill* does not mention sensors coupled to a controller via active buffer circuits. The Examiner further acknowledges that *Hill* does not mention a controller coupled to an excitation transducer via a non-actively buffered connection.

Although the Examiner characterizes the *Paradiso* disclosure as teaching a controller coupled to sensors via active buffer circuits, the Examiner does not identify a teaching or suggestion in *Paradiso* as to an excitation transducer coupled to a controller via a non-actively buffered connection. Applicant's review of *Paradiso* reveals no teaching whatsoever of an excitation transducer. All transducers discussed in *Paradiso* are described as sensing transducers, none of which are coupled to a controller via a non-actively buffered connection.

The asserted combination of *Hill* and *Paradiso* fails to teach or suggest all features of Applicant's claim 1. The modification of the *Hill* apparatus using the apparatus of *Paradiso* as suggested by the Examiner would lack an excitation transducer coupled to a controller via a non-actively buffered connection, as is recited in Applicant's claim 1. For at least this reason, claim 1 is not obvious in view of the combination of *Hill* and *Paradiso*. MPEP § 2142.

Moreover, the asserted combination provides to teachings or suggestions to support the asserted combination. *Hill*, as characterized by the Examiner, does not discuss the connections between its controller and transducers/sensors in terms of actively or non-actively buffered connections. *Hill*, according to the Examiner, is silent on these connectivity features. *Paradiso*, according to the Examiner, teaches only actively buffered circuit connections between its sensors and controller. *Paradiso*, as discussed above, fails to disclose an excitation transducer of any kind. Respectfully, *Hill* and *Paradiso* are devoid of a teaching or suggestion that would support their being combined in the manner suggested by the Examiner.

Further, the Examiner's rationale that supports the obviousness rejection of claim 1 presented on page 7 of the Office Action is in error. The Examiner contends that it would have been obvious for one skilled in the art to combine *Hill* and *Paradiso* to arrive at an apparatus that includes a controller coupled to the sensors via active buffer circuits and to an excitation transducer via a non-actively buffered connection because such an arrangement would "increase signal strength and improve the signal-to-noise ratio (*Paradiso: [0028], lines4-5).*"

Respectfully, *Paradiso*, in paragraph [0028], discusses such an increase in signal strength and improved signal-to-noise ratio only in the context of output signals from transducer 12 that are amplified with a pre-amplifier 17. This teaching in *Paradiso* is directed to sensing transducers, and would appear inapplicable to an excitation transducer. Hence, the Examiner's rationale supporting the obviousness rejection of claim 1 is erroneous.

Respectfully, the teachings of the asserted references would not motivate the skilled artisan to connect sensing transducers to a controller in a manner differing from that in which an excitation transducer is connected to the controller. The asserted combination clearly fails to provide a teaching or suggestion that an excitation transducer should be connected to the controller using a non-actively buffered connection, since *Paradiso* fails to disclose an excitation transducer and *Hill* makes no mention of such a connection.

Applicant respectfully submits that no motivation to combine reference teachings can be found in the combination of *Hill* and *Paradiso*. It is a requirement that actual evidence of a suggestion, teaching or motivation to combine prior art references be shown, and that this evidence be "clear and particular." *In re Dembiczak*, 50 USPQ2d 1614 (Fed. Cir. 1999). Broad conclusory statements regarding the teaching of references, standing alone, are not evidence. *Id.* Moreover, the teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *See In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Further, the prior art must suggest the desirability of the *combination* of the references. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). Respectfully, no motivation to combine reference teachings can be found in the combination of *Hill* and *Paradiso*. Further, no

reasonable expectation of successfully arriving at Applicant's claimed invention is found in the asserted combination.

Because the asserted combination of references fails to teach or suggest several of the above-identified limitations, and because the asserted combination does not provide a sufficient basis to support a reasonable expectation of success or the requisite suggestion or motivation to combine or modify the references in the manner suggested by the Examiner, Applicant respectfully submits that the Examiner has failed to establish *prima facie* obviousness of Applicant's subject matter recited in independent claim 1.

Claims 2-14, 16-20, and 25-28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Hill* and *Paradiso*. Each of claims 2-14, 16-20, and 25-28 depend from independent claim 1 either directly or indirectly. While Applicant does not acquiesce to the particular rejections to these dependent claims, it is believed that these rejections are now moot in view of the remarks made in connection with independent claim 1. These dependent claims include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from the combination of *Hill* and *Paradiso*. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Therefore, consistent with the *In re Fine* decision, dependent claims 2-14, 16-20, and 25-28 are not made obvious by the combination of *Hill* and *Paradiso*.

As such, Applicant respectfully requests withdrawal of the §103(a) rejection of claims 1-14, 16-20, and 25-28, and notification that these claims are in condition for allowance.

It is to be understood that Applicant does not acquiesce to the Examiner's characterization of the asserted art or Applicant's claimed subject matter, nor of the Examiner's application of the asserted art or combinations thereof to Applicant's claimed subject matter. Moreover, Applicant does not acquiesce to any explicit or implicit statements or conclusions by the Examiner concerning what would have been obvious to one of ordinary skill in the art, obvious design choices, alternative equivalent arrangements, common knowledge at the time of Applicant's invention, officially noticed facts, and the like. Applicant respectfully submits that a detailed discussion of each of the Examiner's rejections beyond that provided above is not necessary, in view of the clear absence of teaching and

suggestion of various features recited in Applicant's pending claims and the lack of motivation to combine reference teachings. Applicant, however, reserves the right to address in detail the Examiner's characterizations, conclusions, and rejections in future prosecution.

Claims 1-2 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 14 and 18 of co-pending Application No. 10/750,290.

Applicant respectfully asserts that, in view of the arguments made above, the Examiner is compelled to withdraw the substantive art rejections of the claims. Once withdrawn, the only rejection remaining in the subject application is the provisional nonstatutory obviousness-type double patenting rejection. In view of MPEP § 804 I(B)(1), Applicant respectfully submits that the provisional nonstatutory obviousness-type double patenting rejection should be withdrawn and that the subject application be permitted to issue as a patent.

Authorization is given to charge Deposit Account No. 50-3581 (3MMM.563PA) any necessary fees for this filing. If the Examiner believes it necessary or helpful, the Examiner is invited to contact the attorney of record to discuss any issues related to this case.

Respectfully submitted,

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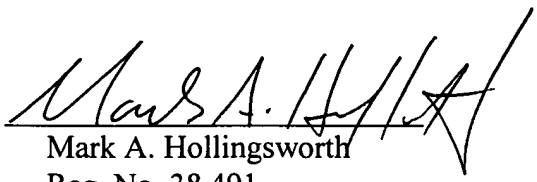
By: 
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